

SEQUENCE LISTING

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<120> Promoters

<130> PWC/P20921WO

<140> PCT/GB99/01949

<141> 1999-06-21

<150> GB 9813345.7

<151> 1998-06-19

<160> 19

<170> PatentIn Ver. 2.1

<210> 1

<211> 473

<212> DNA

<213> Asparagus officinalis

<400> 1

gaattcttat tgcgacctga ctctcttggt gtgctgccga ggtgctgtcg aaattttctgt 60
tgcgcacaac atactgggcc ttgcttgatt tgacagttcc aataattatt tccatgtcat 120
gagagaagca catgactaaa gtaattagct taatccccta aaactcaata caaacgagat 180
gacacatcca cagaaaaaat tctaattagt ctttgctgtg agaaattgga aactgaatac 240
ctacattaat tacaactttt gcaaataaaa tataaagaaa gttctaacat gaagactagt 300
tctaacatga agactagttc acgaactcgt accttattcc acaaaggctt agactttcca 360
caaatcgaga ttatcccatg gactgatgga caccatccaa ttatccctat aaatacctgc 420
ccattcccct cctccagact catctaacta aaaacaacac acaaccaatc atg 473

per # 4112

2

<210> 2

<211> 771

<212> DNA

<213> *Asparagus officinalis*

<220>

<221> CDS

<222> (1)..(672)

<400> 2

atg gct cta tcc aaa gct ttc acc tcc ctc ctc ctc ctc cct gtc ctc 48

Met Ala Leu Ser Lys Ala Phe Thr Ser Leu Leu Leu Leu Pro Val Leu

1

5

10

15

ctc ctg ccc ctc gcc tcc gcc gcc acc ttc acc gtc acc aac aaa tgc 96

Leu Leu Pro Leu Ala Ser Ala Ala Thr Phe Thr Val Thr Asn Lys Cys

20

25

30

acc tac acc gtc tgg gcc gct gca gtg ccg ggg ggc ggt cgc cgc ctc 144

Thr Tyr Thr Val Trp Ala Ala Ala Val Pro Gly Gly Gly Arg Arg Leu

35

40

45

gac ccc aac caa tcc tgg acc ctc acc gtc gcc ccc ggt acc acc ggt 192

Asp Pro Asn Gln Ser Trp Thr Leu Thr Val Ala Pro Gly Thr Thr Gly

50

55

60

gcc cgc atc tgg ggc cga acc ggc tgc tcc ttc gac ccc tct ggc cac 240

Ala Arg Ile Trp Gly Arg Thr Gly Cys Ser Phe Asp Pro Ser Gly His

65

70

75

80

ggc cat tgc cag acc ggt gac tgc ggc ggt ctc ctt gcc tgc acc gcc 288

Gly His Cys Gln Thr Gly Asp Cys Gly Gly Leu Leu Ala Cys Thr Ala

85

90

95

tac ggc tcc cct ccc gac acc ctc gca gaa ttc gcc ctg aac cag tac 336

Tyr Gly Ser Pro Pro Asp Thr Leu Ala Glu Phe Ala Leu Asn Gln Tyr

100

105

110

gcc ggc cag gac ttc tac gac atc tcc ctc gtc gac ggc ttc aac atc 384
 Ala Gly Gln Asp Phe Tyr Asp Ile Ser Leu Val Asp Gly Phe Asn Ile
 115 120 125

ccc atg gac ttc tcc ccg acg tcc gga aat tgc cac gac atc cgg tgc 432
 Pro Met Asp Phe Ser Pro Thr Ser Gly Asn Cys His Asp Ile Arg Cys
 130 135 140

acc gcg gac atc aac ggt cag tgc ccg gcg gag ctg aag gca ccc ggg 480
 Thr Ala Asp Ile Asn Gly Gln Cys Pro Ala Glu Leu Lys Ala Pro Gly
 145 150 155 160

ggg tgt aac aac ccg tgc acc gtg ttc aag acc aat gag tac tgc tgc 528
 Gly Cys Asn Asn Pro Cys Thr Val Phe Lys Thr Asn Glu Tyr Cys Cys
 165 170 175

act/tcg gga ggc tgt ggg ccc acg gac tat tcc aag ttt ttc aag cag 576
 Thr Ser Gly Gly Cys Gly Pro Thr Asp Tyr Ser Lys Phe Phe Lys Gln
 180 185 190

agg tgc cct gat gcg tac agt tac ccc aag gat gac gct acc agc act 624
 Arg Cys Pro Asp Ala Tyr Ser Tyr Pro Lys Asp Asp Ala Thr Ser Thr
 195 200 205

ttt act tgt ccc agt ggg gct gat tac agg gtt gtg ttc tgc cct tga 672
 Phe Thr Cys Pro Ser Gly Ala Asp Tyr Arg Val Val Phe Cys Pro
 210 215 220

tcgagcttac tcagatgttg tgtgagcaat caaactatgg ttaatttgta cgtagctcat 732

taagaacgga ataaggtcgc atgtaagctc tacttgagc 771

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<210> 3

<211> 223

<212> PRT

<213> Asparagus officinalis

<400> 3

Met Ala Leu Ser Lys Ala Phe Thr Ser Leu Leu Leu Leu Pro Val Leu
 1 5 10 15

Leu Leu Pro Leu Ala Ser Ala Ala Thr Phe Thr Val Thr Asn Lys Cys
 20 25 30

Thr Tyr Thr Val Trp Ala Ala Ala Val Pro Gly Gly Gly Arg Arg Leu
 35 40 45

Asp Pro Asn Gln Ser Trp Thr Leu Thr Val Ala Pro Gly Thr Thr Gly
 50 55 60

Ala Arg Ile Trp Gly Arg Thr Gly Cys Ser Phe Asp Pro Ser Gly His
 65 70 75 80

Gly His Cys Gln Thr Gly Asp Cys Gly Gly Leu Leu Ala Cys Thr Ala
 85 90 95

Tyr Gly Ser Pro Pro Asp Thr Leu Ala Glu Phe Ala Leu Asn Gln Tyr
 100 105 110

Ala Gly Gln Asp Phe Tyr Asp Ile Ser Leu Val Asp Gly Phe Asn Ile
 115 120 125

Pro Met Asp Phe Ser Pro Thr Ser Gly Asn Cys His Asp Ile Arg Cys
 130 135 140

Thr Ala Asp Ile Asn Gly Gln Cys Pro Ala Glu Leu Lys Ala Pro Gly
 145 150 155 160

Gly Cys Asn Asn Pro Cys Thr Val Phe Lys Thr Asn Glu Tyr Cys Cys
 165 170 175

5

Thr Ser Gly Gly Cys Gly Pro Thr Asp Tyr Ser Lys Phe Phe Lys Gln
 180 185 190

Arg Cys Pro Asp Ala Tyr Ser Tyr Pro Lys Asp Asp Ala Thr Ser Thr
 195 200 205

Phe Thr Cys Pro Ser Gly Ala Asp Tyr Arg Val Val Phe Cys Pro
 210 215 220

<210> 4
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

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 ccaacaaatg cacctacacc gaattccgcg 30

<210> 5
 <211> 13
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: E-8

<400> 5
 ataagggggtt ggt 13

6

<210> 6
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: JA Box

<400> 6
ccctataggg 10

<210> 7
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: TCA

<400> 7
ttatctcctt 10

<210> 8
<211> 10
<212> DNA
<213> Hordeum vulgare

<400> 8
tcattcttctt 10

<210> 9

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

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cgcggaattc ggtgtaggtg catttgttgg

30

<210> 10

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 10

cgctgcagc caatcctgga ccctcaccg

29

<210> 11

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 11

gggtaccaag cttcttattg cgacctgact etc

33

8

<210> 12

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 12

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41

<210> 13

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 13

gcgaagcttc catgtcatga gagaagcac

29

<210> 14

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 14

gcgaagcttt tggaaactga atacctaca

29

<210> 15

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 15

gcgaagctta caaaggctta gactttcca

29

<210> 16

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 16

gggatccgtc gacctgcaga ttggttgtgt gttgtttttg

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<210> 17

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 17

tctaggtacc ctttgcgtgg tcgacttgga aactgaatac ctac

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10

<210> 18

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 18

tctaggtacc ctttgcgtgg tcgacttgga aactgaatac ctac

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<210> 19

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 19

gaaagtctaa gcctcgaggg aataaggtac gagttcgtgg ac

42